IYP - ProFlight Emulator (PFE) Manual

This document is to assist you in working with your IYP co-pilot (Michelle or Mike) to access and use PFE.

If you have any questions relating to the operation of PFE, please contact the PFE Forum which is located Here.

If you have any questions relating to the way your IYP co-pilot interacts with PFE, please contact us at . . .

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Creating, Saving and Loading a Flight Plan and a Flight

The following is **COMPLEX**! Please read everything thoroughly.

I believe it is safe to say that a great percentage of simmers do **NOT** fully understand the complexities involved in properly setting up a flight in their Microsoft Flight Simulator(s). And frankly, it's no wonder! Microsoft employed an extremely complex methodology in their design.

Flight Plan vs. Flight
You'll note that the caption of this section contains 'a Flight Plan and a Flight'. I made this distinction because there are two completely different principal components that comprise a flight.

The two principal FS9/FSX files are:

1. **The Flight Plan File (.PLN)**
2. **The Flight File (.FLT)**

It's Your Plane (IYP) needs **BOTH** of these files correctly set up in order to operate properly.

Please refer to the...

IYP Flight Deck Doc

for a comprehensive explanation on setting up these files.

Creating Your Flight Plan File
The Flight Plan file has the file extension .**PLN**; typically described in Explorer under the column **Type** as: **PLN file**. This file basically holds all of the information required by the simulator's ATC system and the Garmin GPS. It contains all of the flight's waypoints, altitudes and Top Of Climb (TOC) also referred to as the "Cruising Altitude".

You can use the simulator's built in **Flight Planner** or any number of other 3rd-party applications like **Plan-G** to create your Flight Plan.

Airways
Lower ATS Routes are generally referred to as Class A airspace. Upper ATS Routes are generally referred to as Class B airspace. Basically, in simple terms, it is like looking at a road atlas and choosing which highway or combination of highways that you wish to take to your destination. Each Airway has a designation (like a highway number) and the charts will show the appropriate VOR radials and distances for the Airways.

Please refer to **VATUSA** for a detailed explanation about airways.

Creating Your Flight File
The Flight file has the file extension .**FLT**; typically described in Explorer under the column **Type** as: **FLT file**. This file is created when you **SAVE** your flight in the simulator. This file references the Flight Plan file described above and contains all of the information about the aircraft being flown.

Weather File
The Weather file has the file extension .**WX**; typically described in Explorer under the column **Type** as: **WX file**. This file contains all of the weather information about the flight and is automatically created when you create your Flight file described above.

Creating your PFE Adventure file
Please refer to the **ProFlight Emulator User Manual** for detailed instructions on setting up an Adventure.

After properly setting up ProFlight Emulator as detailed in the PFE manual, there are some additional adjustments that need to be made in order to operate with IYP.

PFE Set Up Procedures

In the PFE documentation, it states that the default HOT KEY settings require that you use the (Ctrl+Shift) combination together with one of the keys in their list of commands, EXCEPT for keys 0 thru 9 the ROGER key and the 'H' and 'L' keys, which only require a single keypress.

EXTREMELY IMPORTANT
In fact, the foregoing set up will invoke serious conflicts with the default FSX settings. For example, in order to synchronize the engine throttles on a Boeing 747, requires the depression of the letter E, followed immediately by the depression of the numbers 1,2,3 and 4. All of the aforementioned numeric keys will collide with PFE. Similarly, opening and closing the aircraft doors, invoking push back tail directions, etc., will also be problematic.

Therefore, it is **IMPERATIVE** that you use the PFE "Hotkey Option" area and ensure that you re-assign **ALL HOTKEYS** to be a combination of (**Ctrl + Shift + key**).

NOTE: There are three (3) exceptions to the foregoing:

Key “0” (Zero) **must be** simply “0”
Key “\” (Roger) **must be** simply “\”
Key “Esc” (Escape) **must be** simply “Esc”

Virtual Co-Pilot Mode

Under the Options #1 PFE panel, ensure that you have the following selected:

CP Mode 0 - Virtual CP is OFF

NOTE: Failure to do so will cause the IYP system to automatically switch you to the **SimpleATC** mode.

Push and Start

Push & Start feature OFF

Ensure that you have the above mode selected!

Final Approach Speed

Open the **PF_Emulator.ini** file under the ROOT PFE folder with Notepad. Search for the section entitled **[Tweaks]**. Scroll down to the entry entitled **FinalApproachSpeed** and change the default value of 0 (zero) to 200. Save and Close the file.

IMPORTANT: PFE File Sharing and Security

IYP - ProFlight Emulator (PFE) Interface
When using ProFlight Emulator for ATC communications, the IYP application needs to access the PFE root folder.

By employing the default installation process, the folder is located here:

C:\Program Files (x86)\Aerosoft\PFE

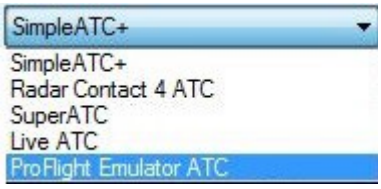
PFE documentation recommends that the system be installed here:

C:\PFE

Irrespective of where you elect to install the PFE programme, the root PFE folder needs to be shared with the group called Everyone, and the share needs to be assigned Full Control.

Click HERE for details

Select ProFlight Emulator ATC
After launching IYP, if you are not already in the ProFlight Emulator ATC mode, minimize your simulator and select ProFlight Emulator ATC from the ATC drop down list on the lower left of the IYP Control Panel...



Your co-pilot will re-initialize your IYP session. During re-initialization, your co-pilot will state that ProFlight Emulator is active and report the local Transition Altitude. After re-initialization, your co-pilot will state:

"Please connect ProFlight Emulator to the simulator at this time."

Go to your PFE control panel and click on:

Select New ADV

Select the ADV that MATCHES the IYP flight you have loaded, then press:

Connect to FS

NOTE: Failure to load the correct PFE flight will cause the IYP system to automatically switch you to the **SimpleATC** mode.

ProFlight Emulator ATC Command Set

GENERAL

Speed restriction has been lifted

CLEARANCE

Request IFR clearance
Request VFR clearance

GROUND BEFORE TAKEOFF

Request taxi clearance
Request altimeter setting
Request radio check

GROUND AFTER LANDING

Request taxi to parking

FSS

Request VFR clearance (after take off VFR)
Request Centre frequency
Switch to IFR flight plan
Switch to VFR flight plan
Request airport advisories
Report position

MULTICOM

Request VFR clearance (after take off VFR)
Announce entering downwind, Report entering downwind
Announce turning base, Report turning base
Announce turning final, Report turning final
Execute Going Around

UNICOM

Request VFR clearance (after take off VFR)
Announce entering downwind, Report entering downwind
Announce turning base, Report turning base
Announce turning final, Report turning final
Request field advisories
Execute Going Around

DEPARTING TOWER

Request take off clearance

DESTINATION TOWER

Request landing clearance, Contact Tower, Contact Controller
Announce entering downwind, Report entering downwind
Announce turning base, Report turning base
Announce turning final, Report turning final
Execute Going Around

DEPARTURE, CENTRE, APPROACH

Going to <FREQUENCY>
Contact Controller, Contact Next Controller, Contact <TRACON NAME>
Request clearance to final at our discretion
Request current position
Request higher altitude due to clouds
Request higher altitude due to turbulence
Request lower altitude due to clouds
Request lower altitude due to turbulence
Request field advisories
Request vectors

Tid-Bits

Switch to IFR Flight Plan
In certain cases, when you ask for an increase in altitude, it will result in you climbing above the Transition Altitude. For example, let us assume that the local Transition Altitude is FL040 (4,000 feet) and you had requested an increase in altitude that yielded an ATC directive to climb to FL065 (6,500) feet. You may hear ATC say (for example)...

> *"Cessna November 176 Charlie Mike, request IFR for flight level 40"*

This is accomplished in a two-step process:

1. Contact FSS to change the flight plan
2. Contact ATC

First, say to Michelle...

> *"Switch to IFR Flight Plan"*

IMPORTANT:
Michelle will COPY the current ATC Com1 frequency to Com1 Standby, then change the Com1 frequency to that of the Flight Service Station (FSS) and activate the correct key presses to send the change in flight plan request to FSS. They will respond with a confirmation that your VFR flight plan has been upgraded to IFR. Once the FSS has completed the dialogue, you ask Michelle to acknowledge the information by asking her to...

> *"Acknowledge"*

Michelle will read-back the confirmation.

To go back to the original ATC Com1 frequency, you can simply say...

> *"Exchange Com1"*

Michelle will SWAP Com1 with Com1 Standby, thereby changing the Com1 frequency back to the original ATC frequency and moving the FSS frequency into Com1 Standby.

At this point you simply ask Michelle to contact the original ATC controller.

Oddities

Changing Altitudes:
Under certain circumstances after contacting ATC, if you subsequently seek an increase in altitude by asking Michelle to... (e.g.)

"Request higher altitude due to clouds"

or

"Request higher altitude due to turbulence"

ATC will instruct you to actually **DESCEND**. The only recourse I have found thus far is to acknowledge the instruction and then repeat the request.

NOTE: This is an open question I have placed on the ProFlight Emulator Support Forum, but I have not as yet received a response.

Acknowledged Instructions Incorrectly:
On approach to ENRO, Ronos, Norway, ATC gave me the instruction to . . .

*"Turn **RIGHT** to 065"*

After I had Michelle acknowledge the instruction, the PFE co-pilot acknowledged the instructions by saying . . .

*"Roger. Turn **LEFT** to 065"*

Landing at a Towered Airport with ONLY a Tower Controller:

1. When landing at a Towered airport where the only Controller on duty is in the Tower (i.e. no Ground, no Unicom, no Multicom), saying the phrase...

   "Announce clear of the runway"

sends command #5 to Ground, even though Ground is non-existent.

HandOff to Same Frequency:
While flying VFR from ENHA to ENRO and tuned to Centre at 125.70, the ATC Controller handed me off to Centre 125.70.